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WORKING PAPER NO. 36

Evidence of the Effect of Restrictive Loan Rate Ceilings on Prices of Consumer Financial Services

Krannert Graduate School of Management – Purdue University

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EVIDENCE OF THE EFFECT OF RESTRICTIVE LOAN RATE CEILINGS ON PRICES OF CONSUMER FINANCIAL SERVICES

A. Charlene Sullivan*

Abstract

This paper investigates the effect of restrictive consumer loan rate ceilings on the provision of and charges assessed by commercial banks for consumer savings and demand deposit services. The study uses data that were collected in four distinct local markets that differed extremely with regard to the applicable rate ceilings. The 31 banks that provided information for the study represented 88.6 percent of the banks serving consumers in the four market areas. Because consumers shop for consumer financial services in their relevant local market, an accurate evaluation of the effects of rate ceilings on terms for household demand and savings deposits can be obtained by holding other socio-economic conditions constant and analyzing differences across market areas.

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The results of the study indicate that in Arkansas, where rates on all types of consumer credit were restricted by the rate ceilings during the study period, the service and overdraft charges assessed on demand deposits were significantly higher than those in states with unrestrictive rate ceilings, holding other things constant. Furthermore, in contrast to the other markets, in Arkansas the sale of loan services was tied more specifically to the sale of other consumer services sold by the bank. However, the rates paid on savings deposits were not lower in the Arkansas market relative to those paid in the other markets analyzed.

EVIDENCE OF THE EFFECT OF RESTRICTIVE LOAN RATE CEILINGS ON PRICES OF CONSUMER FINANCIAL SERVICES

A. Charlene Sullivan

In this study, the effect of consumer loan rate ceilings on price and nonprice terms of consumer demand and savings deposit services is examined. Data collected in a local market study were used to evaluate the effects of restrictive rate ceilings on terms of savings and demand deposit services provided by commercial banks.

I. Price and Nonprice Competition in a Restricted Market

"When a uniform price is imposed upon, or agreed to, by an industry, some or all other terms of sale are left unregulated." [8, p. 148]. Stigler attempted to show that excess profits achieved by suppressing price competition could be eliminated by nonprice competition. For example, when brokerage fees were fixed by law, nonprice competition took the form of free investment information, convenient locations, and plush investment advisors' offices. By the same token, when prices are fixed below the producer's marginal cost of product, nonprice competition could result in a reduction of quality of product, increased implicit costs of obtaining the product, or an arrangement for tying the sale of the price-restricted product to the sale of another product. Alchian and Allen point out in [1] that tie-in sales may be used to overcome price controls. Through the tie-in sale, the producer can capture the value of the controlled product from the consumer in the price of the uncontrolled

product. The consumer will be willing to pay a higher price for the uncontrolled product up to the point where the total cost to the consumer of both products is equal to the total value to the consumer of both products.

Commercial banks, until very recently, operated under regulations that restricted the payment of interest on demand deposits to zero. Others have shown [5] that banks engage in nonprice competition and bid away the excess profits that result from their inability to pay interest on demand deposits. This nonprice competition takes the form of multiple branch offices, longer banking hours, free checking accounts, gifts and tokens for adding to savings and checking accounts, or greater credit availability and lower loan rates (APR).

In this study we will evaluate the extent to which laws restricting rates on consumer loans affect prices of consumer demand and savings deposit services, holding other factors constant. Our basic hypothesis is that when restrictive loan rate ceilings keep the price charged on a loan below the bank's marginal cost of product, the bank will adjust by charging higher prices for demand deposit services or offering a lower return on saving services. We also expect to find the sale of bank loan services in areas where loan rates are restricted tied to the sale of savings and demand deposit services.

In an earlier study, Heggestad and Mingo [4] found that price and nonprice terms of household demand deposit services were a function of the structure of the market in which a bank operated. Their basic hypothesis was that "market structure influences the bank's desire to

compete for customers. The greater is the degree of monopoly in the market, the higher will be bank prices and the worse will be bank services." [4, p. 108] They used data collected in a telephone survey of 332 banks in 69 metropolitan areas to test their hypothesis. Using cross-sectional regression, they estimated the relationship between various prices and nonprices of consumer services and various measures of market structure, holding constant the effects of other supply and demand variables. They found that in more concentrated bank markets, prices were higher and fewer services were offered to household customers. Thus, to evaluate the extent to which restrictive rate ceilings affect prices and availability of demand deposit services, we must hold constant the effects of market structure on observed prices.

II. The Empirical Data Base: The Local Market Study

Personal interviews of credit grantors were conducted in one local market in each of four states in early 1979. The four market areas selected for the study are identified in the grid below:

Rate Ceilings	Market Area
Very Restrictive	I. Little Rock/North Little Rock, AR
Restrictive	II Racine/Kenosha, WI
Less Restrictive	III. Waukegan/North Chicago, IL
	IV. Lake Charles, LA

The four local markets were chosen for empirical study on the basis of the following criteria:

(1) The markets were in states that had major differences in rate ceilings applicable to consumer credit. The impact of differences in rate ceilings may be diffuse. Consequently, it was necessary to select states with extreme differences in legislation in order to find measurable differences in the effects of regulation. In Arkansas, the ceiling rate was a flat ten percent for all types of credit. The ceiling rates allowed under the Wisconsin Consumer Act (WCA) were 18 percent APR up to $500, 12 percent on the unpaid balance above $500 up to $25,000. Louisiana and Illinois had relatively high rate ceilings. The ceiling rates in Louisiana were 36 percent per year up to $800, 27 percent on the balance above $800 to $2,000, 21 percent on the balance above $2,000 to $3,500 and 15 percent on the balance up to $25,000. In Illinois the law allowed an eight and one-half percent add-on rate, which is approximately equal to 19 percent APR. See Appendix A for more information about the regulations in the four markets. During the study period, the loan rate ceiling in Arkansas was restrictive for most types of consumer credit. The ceilings in the other three states were not restrictive for all types of loans.

(2) Markets were chosen to minimize differences in socio-economic characteristics of the residents especially in the case of the northern "paired" cities. The need for multivariate empirical work to adjust for these differences was reduced by matching cities, insofar as possible, in terms of the nature of the industrial base and socio-economic characteristics of the residents. A summary of the socio-economic characteristics of the population in each market is shown in Appendix B.

Local markets were chosen as a basis for research for two reasons. First, local markets are where most consumer financial services are delivered. Second, using a local market data base allowed us to control adequately for differences in market structure.

Structure of Banks in Markets

Thirty-one of 35 commercial banks in the four market areas participated in the study. These banks represented 88.6 percent of banks serving the markets and held approximately 92 percent of all bank assets in the four markets. (See Exhibit 1 for an analysis of bank response to survey.)

The average size of bank was smallest in Wisconsin and largest in Arkansas (Exhibit 2).[1] Using the Herfindahl index as a measure of concentration, bank assets were considerably more concentrated in the Louisiana market than in the other markets.[2] These data indicate that there was considerable variation across the four markets in terms of the structure of banks in the markets. In the Arkansas market the banks serving the market were relatively large, but bank assets were relatively unconcentrated.

III. The Evidence

We evaluated the effect of restrictive rate ceilings on prices and terms of savings and demand deposits. Since there are many different dimensions along which banks can adjust, and our sample was small, the effects were diffuse and difficult to identify with statistical significance.

EXHIBIT 1

COMMERCIAL BANK RESPONSE RATE

Market	Total Number of Banks in Area	Response Rate	% of Total Market Area Bank Assets
I. Little Rock/North Little Rock, AR	8	88%	98%
II. Racine/Kenosha, WI	15	80	71.5
III. Waukegan/North Chicago, IL	7	100	100
IV. Lake Charles, LA	5	100	100
Total	35	88.6%	92%

SOURCE: CRC 1979 Creditors Survey, Credit Research Center, Purdue University

EXHIBIT 2

STRUCTURE OF BANKS

(IN EACH LOCAL MARKET)

	AR	WI	LA	IL
Average size (millions) (total assets)	$249	$48.5	$134.5	$52.8
Herfindahl index	.196	.147	.376	.204

SOURCE: 1979 CRC Creditors Survey, Credit Research Center, Purdue University.

Savings Instruments

As a result of limited gross earnings on loans made in a restrictive-rate state, one might hypothesize that rates paid to savers would be lower in those areas than rates paid in the unrestricted areas. However, the relevant market for savings instruments is a national one (money market funds, Treasury bills) and savings institutions would be unlikely to follow such a strategy. In Exhibit 3 we show the average rates paid on various savings instruments by the banks and savings and loan associations serving each of the market areas. The table indicates very little variation in average rates paid in the four market areas by commercial banks and no variation in the average rates paid by savings and loan associations in the four areas--each association was paying the maximum rate allowed by law. Thus, the restrictive loan rate ceilings in Arkansas had no effect on the rates that savers earned on savings deposits at banks (or at savings and loan associations).

Prices of Demand Deposit Services

We tested our hypothesis that restrictive rate ceilings would affect explicit and implicit prices of a bank's household demand deposit services, holding constant the structure variables, by regression analysis of four "prices" of services: (1) number of hours per week that a bank's offices were open to service household consumers; (2) charges levied by a bank for a nonsufficient funds (NSF) check; (3) whether a bank offered a special checking or check overdraft account; and (4) whether a bank offered automatic teller services. We also analyzed service charge schedules on household demand deposits in the four market areas.

EXHIBIT 3

AVERAGE RATES (APR) PAID ON SAVINGS INSTRUMENTS BY SAVINGS INSTITUTIONS BY MARKETS

	Banks N=31				Savings and Loan Associations[2] N=21			
Savings Instrument	WI	IL	AR	LA	WI	IL	AR	LA
$1000 CD - 90 day	5.5	5.5	5.4[1]	5.5	5.75	5.75	5.75	5.75
$5000 CD - 90 day	5.5	5.5	5.4[1]	5.5	5.75	.575	5.75	5.75
$1000 CD - 1 year	6	6	6	6	6.5	6.5	6.5	6.5
$5000 CD - 1 year	6	6	6	6	6.5	6.5	6.5	6.5
$1000 CD - 4 year	7.25	7.14	7.14	7.25	7.5	7.5	7.5	7.5
$5000 CD - 4 year	7.25	7.20	7.14	7.25	7.5	7.5	7.5	7.5
$1000 CD - 6 year	7.5	7.5	7.5	7.5	7.75	7.75	7.75	7.75
$5000 CD - 6 year	7.5	7.5	7.5	7.5	7.75	7.75	7.75	7.75
Passbook account	4.9	5.0	5.04[1]	5.0				

[1]In the Arkansas market, one bank followed a strategy of paying a rate other than the maximum rate allowed by law for several types of savings instruments.

[2]This represents the average rate paid on savings by 100 percent of savings and loan associations in each market.

SOURCE: 1979 CRC Creditors Survey, Credit Research Center, Purdue University.

The following equation was estimated for each "price" variable, Y_i:

$$Y_i = f(S_i, C, MS_i, LR)$$

where the independent variables are:

S_i = total assets of the bank at year-end, 1977.

C = concentration of bank assets in the relevant local market, measured by the Herfindahl index.

MS_i = bank's share of total bank assets in the relevant market at year-end, 1977.

LR = binary dummy variable for the restrictive loan rate ceiling in Arkansas.

The dependent variables analyzed (Y_i) were:

HRS = average number of hours per week bank offices were open for household customer services.

NSF = charge for each non-sufficient funds (NSF) check.

SP = binary variable representing whether a bank offered special overdraft checking accounts.

ATM = binary variable representing whether a bank offered automatic teller services.

The means and standard deviations for each variable are shown in Exhibit 4. Variables representing differences in demand conditions across the four market areas were not included, because the local markets were selected for the study such that factors affecting demand conditions would be approximately the same in each market.

EXHIBIT 4

INDEPENDENT AND DEPENDENT VARIABLES

	Mean	Standard Deviation	N
1. Number of hours offices open per week	43.65	8.72	31
2. NSF check charge	$5.13	1.34	31
3. Offer special checking accounts (1=yes)*	.48	.51	31
4. Offer ATM service (1=yes)*	.39	.50	31
5. Herfindahl index	.21	.08	4
6. Market share	.12	.12	31
7. Size (total assets)	$109M	128M	31
8. Low rate state (1=yes)*	.23	.43	

*The binary variable mean represents the percentage of the total sample that offered the service in question or that operated under the specified regulatory condition.

For the analysis, a step-wise regression technique was used where the variable representing the restrictive rate ceiling state entered first, followed by the bank size, concentration, and market share variables. The rate ceiling dummy variable and the size variable were strongly and positively correlated as were the size and market share variables. As a result of the multicollinearity among the independent variables the variable coefficients are unbiased but inefficient.

The results indicate that, holding constant differences in market structure, banks in the Arkansas area were open to provide consumer services fewer hours per week and charged a significantly higher fee each time a consumer overdrafted a check account relative to banks in the other market areas analyzed (Exhibit 5). Banks in Arkansas were more likely to offer special checking and automatic teller services than banks in the other markets but the coefficients for the low-rate variable were not significant.[3] The signs of the coefficients of the structure variables in each equation were consistent with those found by Heggestad and Mingo [4].

Other Evidence Concerning Pricing Of Demand Deposits

To analyze the effect of restrictive rate ceilings on specific service charges on demand deposits, three types of information were used: (1) aggregate data concerning demand deposit service charges relative to total demand deposits taken from the FDIC Statement of Condition Report for all banks in the market areas (including the specified local markets) as defined by the FDIC; (2) information on demand deposit service charges

EXHIBIT 5

REGRESSION COEFFICIENTS OF INDEPENDENT VARIABLES

(t-values in parentheses)

	α	LR	S_i	C	MS_i	R^2	F
1 HRS_i	59.37	-4.90 (-1.01)	-.0000 (-.05)	-67.27 (-3.77)*	-4.25 (.19)	.45	5.24*
2 NSF_i	3.81	1.63 (1.92)**	-.0001 (-.15)	+5.49 (1.76)**	-1.02 (-.26)	.29	2.60**
3 ATM_i	.13	.38 (1.31)	.0000 (.84)	-.094 (-.089)	.57 (.43)	.40	4.35*
4 SP_i	.60	.27 (.73)	.0000 (-.52)	-.48 (-.35)	.18 (.11)	.04	.30

*Significant at five percent confidence level

**Significant at ten percent confidence level

SOURCE: CRC 1979 Creditors Survey, Credit Research Center, Purdue University.

from brochures gathered by interviewers in the local market banks; (3) responses given by bank managers to questions concerning the extent to which charges for demand deposit services were raised when market interest rates rose above the maximum loan rate allowed by law.

Aggregate Data

Service charges on demand deposits relative to total operating income and total IPC (Individual, Proprietor, and Corporations) demand deposits were generally higher in the southern states than the northern states included in the study. The following aggregate information was collected from the FDIC Statement of Condition Reports for 1977:

Market Area in:	Demand Deposit Service Charges/Operating Income[4]	DD Service Chg./ IPC Demand Deposits[4]	Herfindahl Index
Arkansas	3.64%	.98%	.196
Louisiana	3.97	.86	.376
Illinois	1.05	.40	.204
Wisconsin	1.37	.48	.147

The relatively high charges in the Louisiana market and the low charges in the markets in the northern states could be partially explained by the level of concentration of bank assets in those markets.[5] In the Arkansas market, the high level of service charges relative to income and total IPC demand deposits suggests that, holding constant the effect of concentration on service charges, service charges on consumer demand deposit accounts were relatively higher than those in the northern markets.[6]

Brochure Data

Data concerning service charges on regular checking accounts were tabulated from pamphlets and brochures collected from the surveyed banks (Exhibit 6). Comparison of regular checking account charges in the four state areas reveals interesting differences. In Arkansas, a maximum charge of $4 per month for checking account balances less than $100 was reported by three of the seven banks interviewed. One bank charged $4 per month plus a per-check charge if the balance in the checking plus savings account fell below $500. By contrast, only one bank in Louisiana charged a $4 monthly fee when the minimum balance was less than $100. No free checking was available in the southern states. In Illinois, four of the seven banks interviewed provided free checking. In Wisconsin, information on check charges was available from only five of the 12 banks surveyed. Of those five, three provided free regular checking accounts where the customer paid only check printing charges. The other two required a minimum balance for free checking but did not specify charges that would be incurred when the balance fell below the minimum. These data also indicate that prices for demand deposits were generally higher in the southern states than the northern states.

Questionnaire Data

Each bank manager was asked what types of changes had been made by bank management in response to increases in market interest rates which had occurred in the six-month period before the survey. The managers were

EXHIBIT 6

CHECKING ACCOUNT CHARGES

Arkansas			Wisconsin		
# of Banks	Minimum Balance	Monthly Charge ($)	# of Banks	Minimum Balance	Monthly Charge ($)
2	≥ $300	$0	1	$100	$0
	200-299	2			
	100-199	3			
	< 100	4			
1	≥ 300	0	2	Free checking. Only charge for check printing	0
	< 300	3			
1	> $400	0		Free checking. Only charge for check printing	0
	300-399	1			
	200-299	2			
	100-199	3	1	Free checking.	0
	< 100	4			
1	> $200	0	1	> $200 Pay only check printing charge. Else pay per check	0
	100-199	2			
	0-99	3			
1	$200	0	7	No information	
	< 200	2			
1	< $500*	4+15¢/check			
	500-999	2+15¢/check			
	1000-2999	15¢/check			
	> 3000	0			

*checking plus savings balance

EXHIBIT 6 (continued)

Illinois			Louisiana		
# of Banks	Minimum Balance	Monthly Charge ($)	# of Banks	Minimum Balance	Monthly Charge ($)
1	$200	$0	1	> $400	$0
	< 200	3		300-399	1
				200-299	2
1	< 100	3		100-199	3
	100-199	2		< 100	4
	200-299	1			
	< 300	0	1	$300	0
				< 300	0
4	Free checking				.06 per check
			1	> 250	0
				< 250	2.50
1	No information		2	No Information	

asked if any changes had been made in charges on checking accounts as a result of increases in the cost of money. In Arkansas, 57 percent of bank managers said that charges on checking accounts had been increased compared to 14 and 40 percent in Illinois and Louisiana respectively and 25 percent in Wisconsin, an indication that demand deposit customers in Arkansas were more likely to be affected by increases in the banks' cost of capital than deposit customers in the other three markets. In the other markets, various loan terms were adjusted to reflect changes in market interest rates. See Peterson [7] for a complete analysis of changes in loan prices and savings rates offered as a result of changes in the general level of interest rates.

Tie-in Sales of Loans and Demand Deposits

Finally, we examined the extent to which the sale of a personal loan was tied to the sale of demand deposit or other bank services. We expected to find that banks in Arkansas would be more likely to require their loan customers to have a checking account at the lending bank because of tie-in pricing of the two products. We asked bank managers to indicate what factors were emphasized in their marketing efforts for direct consumer loans. The factors that they chose from were low rates, easy credit, convenient locations, convenient hours, tie-in with other services and service in general. The distribution of responses for each factor are shown in Exhibit 7.

Bankers in Louisiana were most likely to emphasize convenient locations in their loan advertisements. Bankers in Illinois were most likely to emphasize convenient hours. Bank advertisements for direct consumer loans in Arkansas and Wisconsin were most likely to

EXHIBIT 7

FACTORS EMPHASIZED IN MARKETING OF CONSUMER LOANS

(RESPONDENTS CHOSE ONE OR TWO FACTORS)

	Wisconsin	Illinois	Arkansas	Louisiana
Low Rates	0%*	29%	0%	20%
Easy credit terms	25	57	0	20
Convenient locations	36	0	43	80
Convenient hours	27	71	14	20
Tie-in with other services	54	14	57	40
Service	58	29	86	20

*Numbers represent the percent of bank managers that emphasized the particular factor in their marketing for direct consumer loans.

SOURCE: CRC 1979 Creditors Survey, Credit Research Center, Purdue University.

emphasize service. Bank managers in Arkansas indicated "tie-in with other services" 47 percent of the time compared to 40 percent for managers in Louisiana and 14 percent of managers in Wisconsin. Service was described by bankers in Arkansas as personal friendly service, courtesy, speed and cross-selling.

IV. Conclusions

The results of this study indicate that, holding other things constant, banks operating under restrictive loan rate ceilings had higher service charges on demand deposit accounts and checking account overdrafts and were open fewer hours per week to provide consumer services than banks operating in less restricted markets. In addition, in the Arkansas market, the sale of personal loans was more likely to be tied to the sale of other bank services relative to the other markets. We conclude that when income from the loan activity was restricted by regulation, Arkansas banks earned their required return on loans by tying the sale of a loan to that of a product or products that were not restricted in price. The results also indicate that savings account customers did not earn a lower return than that available to consumers in the other markets. This follows from the fact that the market for savings is national in scope.

FOOTNOTES

[1]Little Rock is the largest city in the state of Arkansas, the capital and the financial center of the state. Thus, the relatively large bank size in that market could be attributable to government and correspondent banking activities.

[2]Herfindahl index is equal to $\sum_{i}^{i} (MS_i)^2$ where MS is the market share of bank i in its relevant market area. Data for banks not responding to the survey were included in the calculation of the index for each market.

[3]Large sampling error due to the small sample size creates a problem in this analysis. Multicollinearity in the independent variables results in unbiased but inefficient coefficients which may have no statistical significance.

[4]This information was not collected for each respondent bank. Therefore, the figures used were taken from 1977 Statements of Condition reported by the Federal Deposit Insurance Corporation. The Statements of Condition are reported for all insured banks within a state and all insured banks within major market areas within a state. For each market area used in the study, the information for all banks in the corresponding market were extracted. For each market area other than the Illinois market, the respondent banks held more than 60 percent of the total bank assets in the market area as defined by the FDIC.

[5]The results of the previous regression analyses suggests that NSF charges were significantly positively related to the level of concentration in a market.

[6]In many banks, schedules for service charges on personal demand deposits are published but many individuals are exempted from paying through various special programs. Thus, the differences across states could be attributable to differences in banks' exemption policies.

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APPENDIX A: REGULATIONS FOR EACH LOCAL MARKET

TABLE 1: DATA ON LOAN RATES & CREDITOR'S REMEDIES FOR SELECTED STATES*

	Ark.	Ill.	La.	Wisc.
I. Remedies				
1. Fees clauses allowed	Yes	Yes		Yes
2. Conf. judgment allowed		Yes	No for small loans and after maturity	No
3. Blanket security	Yes	Yes	Requires notarized list of security	Restricted
4. Waiver of exemption	Yes	Yes	Yes	Yes
5. Repossession	Yes, UCC	Yes, UCC	No self-help	Judicial
6. Deficiency judgment	Yes, under UCC	Limited election	No UCC	Limited election
7. Garnishment (exemptions)	$200/person $900 HH head &25/week	SC5/$50 week or 85% or Federal	$70 or prohibited	75% or 40 x min. wage + $15/dependent
8. Wage assignments	Yes but restricted	Restricted	Yes but restricted	Restricted
9. Late charges	No provision	5% or $10	Deemed interest must be less than max. rate 3% or $5	3% or $3
10. Collection charges	No provision	Attorney's & court fees	Attorney's fees up to 25% of balance due	Severely limited No attorney's fees
II. Rate Ceilings				
1. Retail revolving: rates and point where lower rate is effective	10%	1.8% monthly, 70¢ min bank 1.5% monthly	1.5% A.D.B., monthly 50¢ min	1.5%, 1% above $500
2. $3,600 3 yr. new auto loan	10%	14.55	15.00	12.83
3. $1,000 1 yr. small loan	10%	25.67% small loan or 18.57%, CI Loan Act refin. charge	35.45%	18.52% DLA or 16.31% WCA

*Sources are Feldman and Reiley (1977) and Gushee (1978).

APPENDIX B: THE LOCAL MARKETS

The local markets selected for the survey had to meet a number of requirements. First, they had to be located in states with substantial differences in rate ceilings and restrictions on creditors' remedies. Second, they had to encompass well defined market areas. Since consumer credit shopping is ordinarily confined to local markets, it was important that each survey area be self-contained. Third, each market had to contain a labor market where a relatively high proportion of workers was employed in construction, manufacturing, or trade. This requirement was established so that each locality would include a high proportion of people who might be dependent on fluctuating sources of income and, thus, might be relatively risky credit users. Finally, it was deemed desirable to include in the survey two adjacent localities that had many similar socio-economic characteristics, but differed in that they were located in states with substantially different creditor remedies and rate ceilings.

The adjacent markets selected for study were Racine/Kenosha, Wisconsin and Waukegan/North Chicago, Illinois. In addition, Lake Charles, Louisiana and Little Rock/North Little Rock, Arkansas were selected for study because of the unique laws applicable in each state. These cities met all of the study's requirements with only minor deviations.

A principle deviation was that the proportion of workers employed in cyclical industries (at 45 percent in manufacturing, trades, and construction) in the Arkansas market was somewhat below the proportion employed in such occupations in the other markets--particularly the

Northern markets. However, mitigating factors--principally the fact that Little Rock was the only large city in central Arkansas and, as such, would be expected to be the site for consumer finance companies if any operated in the state, overcame this limitation. A second deviation lay in the fact that average incomes generally were higher in the Northern than in the Southern cities. However, this could be explained by North-South "cost-of-living" differences, so it need not invalidate North-South comparisons so long as such differences are taken into account when appropriate. In spite of the income differences, the educational status of residents in both the Northern and Southern cities was quite similar.

An extensive set of economic and social characteristics applicable to each market was compiled before the surveys were undertaken. Those data are presented in the following table.

TABLE 1

SOCIO-ECONOMIC DATA ON SURVEY CITIES

Market Characteristic	Illinois		Wisconsin	
	North Chicago	Waukegan	Racine	Kenosha
Population (000)	47	65	95	79
Population per sq. mi. (000)	8.01	4.05	7.26	5.75
Pop. change 1960-1970 (%)	106.1	17.1	6.8	16.1
White population	39	56	85	77
Black population	8	8	10	2
Change in black '60-'70 (%)	71.2	86.3	+114	105.0
Median age	20.0	27.6	27.2	27.3
One person H.H. (000)	.7	3.7	5.6	4.2
Age 25 or over (000)	13	35	50	42
Median schooling	12.1	12.2	11.9	11.9
H.S. Grad (%)	53.7	56.7	49.5	49.1
Labor force (000)	32	30	39	32
Civilian labor force (000)	6	29	39	32
Female labor force (000)	3	12	15	12
Married female labor force (%)	64.5	57.4	54.9	57.2
Unemployed (%)	4.3	3.3	5.1	4.7
Employed (000)	6	28	38	30
Employed in mfg. (%)	35.7	35.9	48.4	43.8
Employed in trade (%)	14.8	17.4	17.9	19.6
Employed in services (%)	6.8	6.5	5.3	4.0
Employed in education (%)	5.4	5.9	7.0	8.2
Employed in construction (%)	2.6	4.6	2.2	3.4
Employed in gov't. (%)	28.2	18.4	11.2	12.4
White collar employment				
Professional or managerial (%)	14.8	21.9	19.8	19.5
Sales employment (%)	24.1	27.9	24.4	22.1
Craftsmen & foremen (%)	12.3	13.1	14.0	14.8
Income under $3,000 %	5.5	5.5	6.3	6.3
3 to 5 K %	8.7	6.9	7.8	7.7
5 to 7 K %	19.7	9.0	9.5	9.[illegible]
15 to 25 K %	13.1	23.3	17.3	15.6
25 K or more %	2.1	4.7	3.1	2.3
Median (family) income	8,898	11,473	10,522	10,19[illegible]
Median for whites	8,776	11,796	10,730	10,244
Median for blacks	10,019	8,448	7,684	7,313
Per capita income	2,432	3,656	3,193	3,039
% below poverty level	6.8	6.0	6.6	6.1
Avg. persons per household	3.6	3.1	3.2	3.3
Owner occupied housing (%)	37.3	57.8	63.8	66.2

TABLE 1 (CON'T.)

Market Characteristic	Illinois		Wisconsin	
	North Chicago	Waukegan	Racine	Kenosha
Manufacturers (#)	28	76	244	106
% with 20+ employees	53.6	48.7	40.6	37.7
Retail trade outlets (#)	117	589	868	721
% with payroll	72.6	81.0	76.2	73.2
Retail sales (million $)	12.16	166.45	166	121
Change '63-'67	38.3	29.5	23.5	13.4
Food (% of retail sales)	15.2	19.6	28.5	25.0
Auto (% of retail sales)	D	16.1	15.8	12.3
General mdse. (% retail sales)	D	21.4	15.3	17.3
Wholesale outlets (#)	9	90	131	78
Sales (million $)	3.16	101.57	102	45
# of banks	1	5	7	5
# extra branches	0	0	2	0

D - withheld to avoid disclosure

TABLE 1 (CON'T.)

SOCIO-ECONOMIC DATA ON SURVEY CITIES

Market Characteristic	Arkansas		Louisiana
	Little Rock	N. Little Rock	Lake Charles
Population (000)	132	60	78
Population per sq. mi. (000)	2.51	2.33	3.391
Pop. change 1960-1970 (%)	22.9	3.5	23.0
White population	99	50	54
Black population	33	10	25
Change in black '60-'70 (%)	31	-27.3	77.1
Median age	30.3	30.3	24.3
One person H.H. (000)	9.7	3.3	3.7
Age 25 or over (000)	75	34	38.1
Median schooling	12.4	12.1	12.0
H.S. Grad (%)	64.1	54.2	50.5
Labor force (000)	57	25	28
Civilian labor force (000)	57	24	28
Female labor force (000)	25	10	10
Married female labor force (%)	53.5	64.2	56.0
Unemployed (%)	3.3	3.1	6.2
Employed (000)	55	24	26
Employed in mfg. (%)	16.4	17.4	15.2
Employed in trade (%)	21.5	22.9	23.9
Employed in services (%)	9.4	8.9	10.6
Employed in education (%)	7.6	5.6	10.1
Employed in construction (%)	5.3	6.3	9.3
Employed in gov't. (%)	20.8	17.4	15.8
White collar employment			
Professional or managerial (%)	29.6	23.7	25.0
Sales employment (%)	29.7	29.3	24.6
Craftsmen & foremen (%)	9.9	14.4	14.8
Income under $3,000 %	12.2	13.0	14.8
3 to 5 K %	12.4	12.4	12.3
5 to 7 K %	13.4	12.8	14.1
15 to 25 K %	13.8	11.6	12.3
25 K or more %	5.0	2.5	3.1
Median (family) income	8,785	8,467	8,297
Median for whites	10,075	9,190	9,883
Median for blacks	4,835	3,510	4,634
Per capita income	3,165	2,764	2,600
% below poverty level	13.5	14.7	17.5
Avg. persons per household	2.9	3.0	3.4
Owner occupied housing (%)	60.3	62.7	64.5

TABLE 1 (CON'T.)

Market Characteristic	Arkansas		Louisiana
	Little Rock	N. Little Rock	Lake Charles
Manufacturers (#)	220	67	45
% with 20+ employees	41.4	29.9	28.9
Retail trade outlets (#)	1,515	658	716
% with payroll	71.9	63.5	70.5
Retail sales (million $)	318	100	136
Change '63-'67	36.3	19.6	35.3
Food (% of retail sales)	18.0	22.8	22.5
Auto (% of retail sales)	22.8	33.5	19.6
General mdse. (% retail sales)	17.1	3.1	19.6
Wholesale outlets (#)	427	112	126
Sales (million $)	543	119	112
# of banks	7	2	5
# extra branches	27	7	9

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